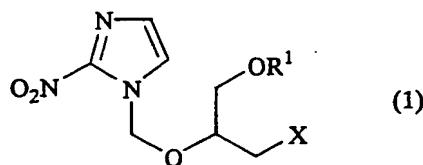


Claims

1. A nitroimidazole derivative represented by the following formula (1):



[wherein R¹ represents a hydrogen atom or a C1-C4 alkanoyl group; and X represents a fluorine atom or an isotope thereof].

2. A nitroimidazole derivative according to claim 1, wherein X is ¹⁸F.

3. A diagnostic imaging agent comprising, as an active ingredient, a nitroimidazole derivative as recited in claim 1 or 2.

4. A diagnostic imaging agent according to claim 3, which is used for imaging an ischemic site or cancer cell.

5. A diagnostic imaging agent according to claim 4, wherein the cancer cell is a chemotherapeutic-agent-resistant or radiation-resistant cancer cell.

6. Use of a nitroimidazole derivative according to claim 1 or 2 as a diagnostic imaging agent.

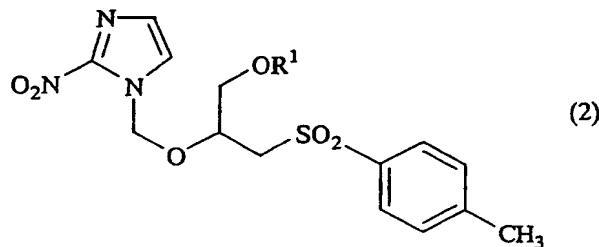
7. Use according to claim 6, wherein the diagnostic imaging agent is used for imaging an ischemic site or cancer cell.

8. A method of diagnostic imaging comprising administration of a nitroimidazole derivative as recited in

claim 1 or 2 for imaging.

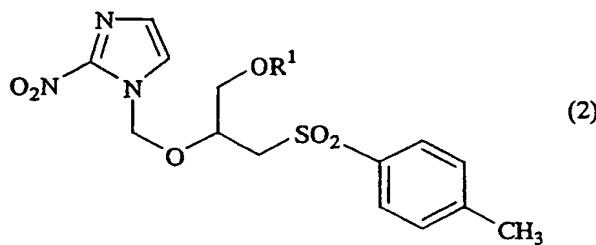
9. A method of diagnostic imaging according to claim 8,
wherein an ischemic site or cancer cell is imaged.

10. A nitroimidazole derivative represented by the
following formula (2):



[wherein R¹ represents a hydrogen atom or a C1-C4 alkanoyl group].

11. A method for producing a nitroimidazole derivative as recited in claim 1, comprising fluorination of a nitroimidazole derivative represented by the following formula (2):



[wherein R¹ represents a hydrogen atom or a C1-C4 alkanoyl group].